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FEDERAL - STATE COOPERATIVE

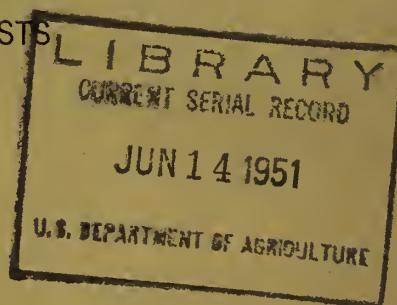
SNOW SURVEYS AND IRRIGATION WATER FORECASTS

for

**Oregon**

By

Division of Irrigation, Soil Conservation Service  
United States Department of Agriculture  
and  
Oregon Agricultural Experiment Station



As of

MAY. 1, 1951

Data included in this report were obtained by the agencies named above in cooperation with the Oregon State Engineer, U. S. Forest Service, National Park Service and other Federal, State and local organizations.



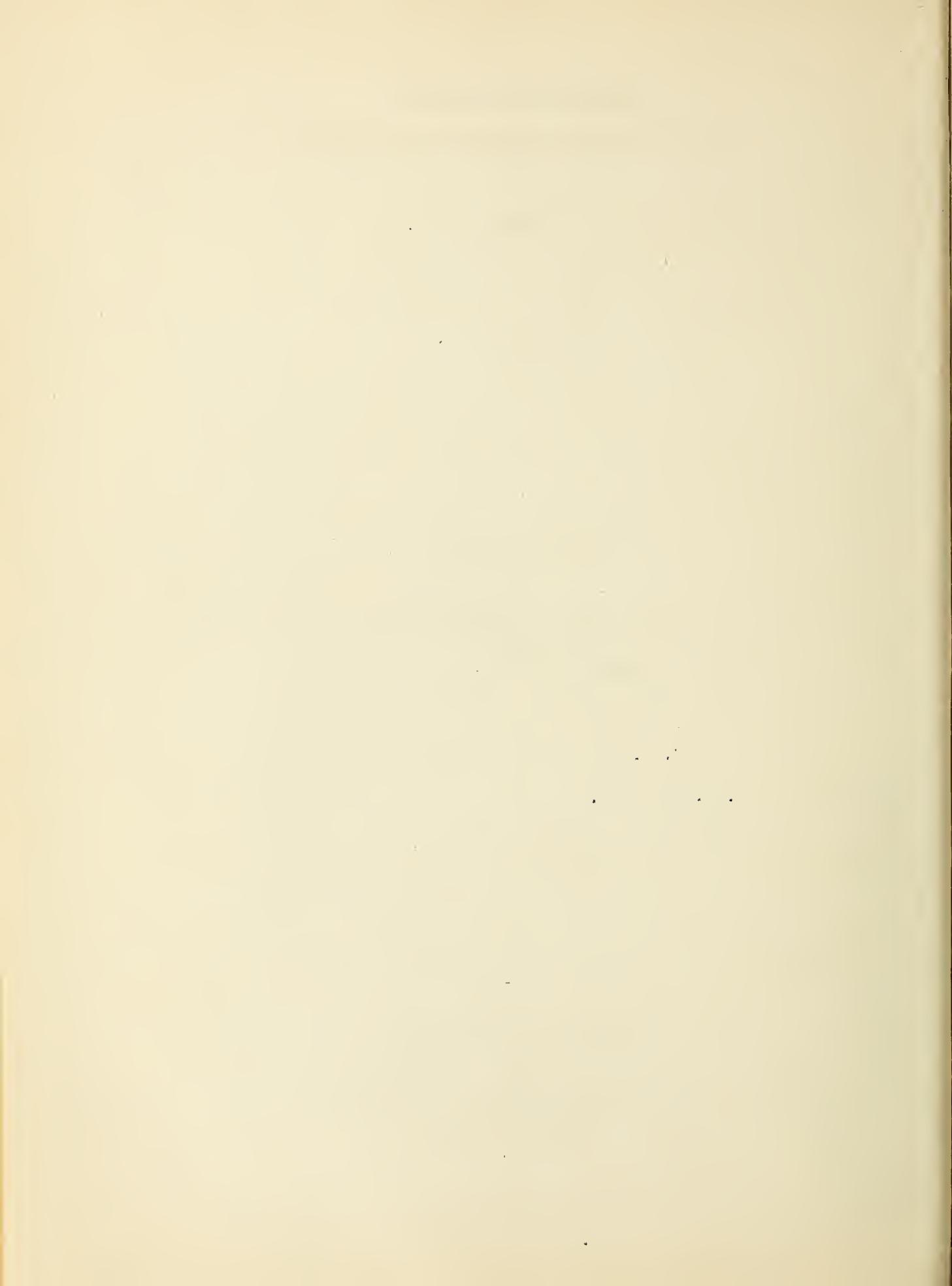
FEDERAL-STATE COOPERATIVE  
SNOW SURVEYS AND IRRIGATION WATER FORECASTS  
FOR  
OREGON

Report Prepared

by

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May 1, 1951

## REVISED WATER SUPPLY OUTLOOK

- Revisions in Oregon's 1951 water supply prospects, occasioned by the recent April drought, indicate most of the state will receive "good" supplies although late season deficiencies of water will probably occur on many small streams with low elevation watersheds. Stored water in reservoirs is now 105 percent average although in a few cases only a minimum supply is available.

Snow survey records, as of May 1, clearly show the affects of excessively heavy April thaws. Present snow cover contains about 15 percent less water than average and about 30 percent less than last year at this date. High elevation snow still retains satisfactory water supplies as indicated by surveys at Phlox Point on Mt. Hood, Annie Spring near Crater Lake and Aneroid Lake in the Wallowa Mountains. At Phlox Point the snow contains 65.7 inches of water compared with 100.1 inches last year and an average of 60.0 inches. Snow at Annie Springs contains 46.8 inches of water compared with 46.5 last year and an average of 38.6 inches. At Aneroid Lake the snow contains 37.4 inches of water compared with 46.8 inches last year and an average of 33.0 inches. Low elevation snow is notably below average.

State-wide precipitation during April was only about 50 percent normal varying from 28 percent normal in the Wallowa Mountain region and 37 percent normal in the Willamette Valley to 80 percent normal in the South-central Oregon region. April temperatures were abnormally high with Portland reporting 4.0 degrees above the mean, Medford +6.0, Burns +5.7 and Lakeview +8.1.

Total water stored in the larger Oregon reservoirs is now 7 percent greater than at this date last year, 8 percent greater than in 1949 and 5 percent greater than the 10-year average, 1940-49.

Revisions in streamflow forecasts have been made in accordance with the unusual melting conditions experienced in April. Flow of many small streams with low elevation watersheds has already passed the peak and will drop off rapidly. Deficient water supplies can be expected in these cases, but streams with high elevation watersheds should have good supplies this year.

See pages 2, 3 and 3a for streamflow forecasts.



REVISED STREAMFLOW FORECASTS, MAY 1, 1951

The following summarized runoff forecasts are based on mountain snow cover and on the assumption that precipitation and temperature during the remainder of the runoff season will be approximately normal. Appreciable deviations from normal of temperature and/or precipitation, especially during May or June, will correspondingly modify those forecasts.

BASIN AND STREAM	Apr.-Sept., inc. Streamflow in Thous. A.F.				
	Forecast 1951	1950	Measured Runoff* 1949	1948	10-yr avg. 1940-49
<u>NORTHCENTRAL OREGON</u>					
Hood River, W.Fk. near Doc	190.0	228.6	225.1	158.1	142.4
White R. below Tygh Valley	180.0	a	265.6	177.0	159.8
Hood R. at Powderdale plus Power Canal	550.0	497.6	483.2	338.9	289.5
<u>UMATILLA-WALLA WALLA</u>					
Walla Walla R. So.Fk. nr. Milton	65.0	a	84.8	102.1	68.6
Umatilla R. near Gibbon	85.0	106.7	110.1	148.7	87.7
Umatilla R. at Pendleton	160.0	a	212.9	311.3	171.3
McKay Cr. above McKay Reservoir	25.0	a	22.7	63.4	29.6
<u>NORTHEASTERN OREGON</u>					
Grande Ronde R. nr. LaGrando	145.0	a	191.5	366.2	182.2
Catherine Creek near Union	70.0	a	73.0	109.9	70.2
Bear Creek near Wallowa	75.0	a	73.6	93.5	70.5
Lostine R. near Lostine	185.0	a	130.2	153.5	122.9
Hurricane Cr. near Joseph	47.0	a	48.6	59.4	45.2
Wallowa R. E.Fk. plus Power Pl.	12.0	a	11.3	15.7	11.3
Imnaha River at Imnaha	350.0	a	254.0	451.2	295.7
Powder River at Salisbury	70.0	a	70.0	78.6	62.3
Burnt R. Nr. Hereford(Natural Flow)	45.0	a	47.0	62.7	40.3
<u>EASTERN OREGON</u>					
Malheur R. Mid.Fk.nr. Drewsey	76.0	70.0	68.5	74.0	75.1
Malheur R. N.Fk. at Boulah	64.0	57.0	56.5	64.4	60.3
Owyhee R. above Owyhee Reservoir	575.0	320.0	456.4	237.3	397.0
John Day R. at Prairie City, combined with Power Canal	60.0	a	44.9	91.4	51.8
John Day R. Mid.Fk. at Ritter	150.0	a	123.2	223.7	121.4
John Day R. No.Fk. near Dale	300.0	a	288.2	425.0	228.8
Strawberry Cr. nr.Prairie City	8.0	a	8.3	11.0	8.4
<u>LARNEY BASIN</u>					
Silvies R. near Burns	75.0	a	79.1	133.1	94.2
Donner und Blitzen R. nr. French- glon	85.0	a	45.9	81.4	63.5
Trout Creek near Denio	10.0	a	5.1	8.4	8.6

\* - Discharge data from preliminary records of U. S. Geological Survey  
and Oregon State Engineer

a - Discharge data not available



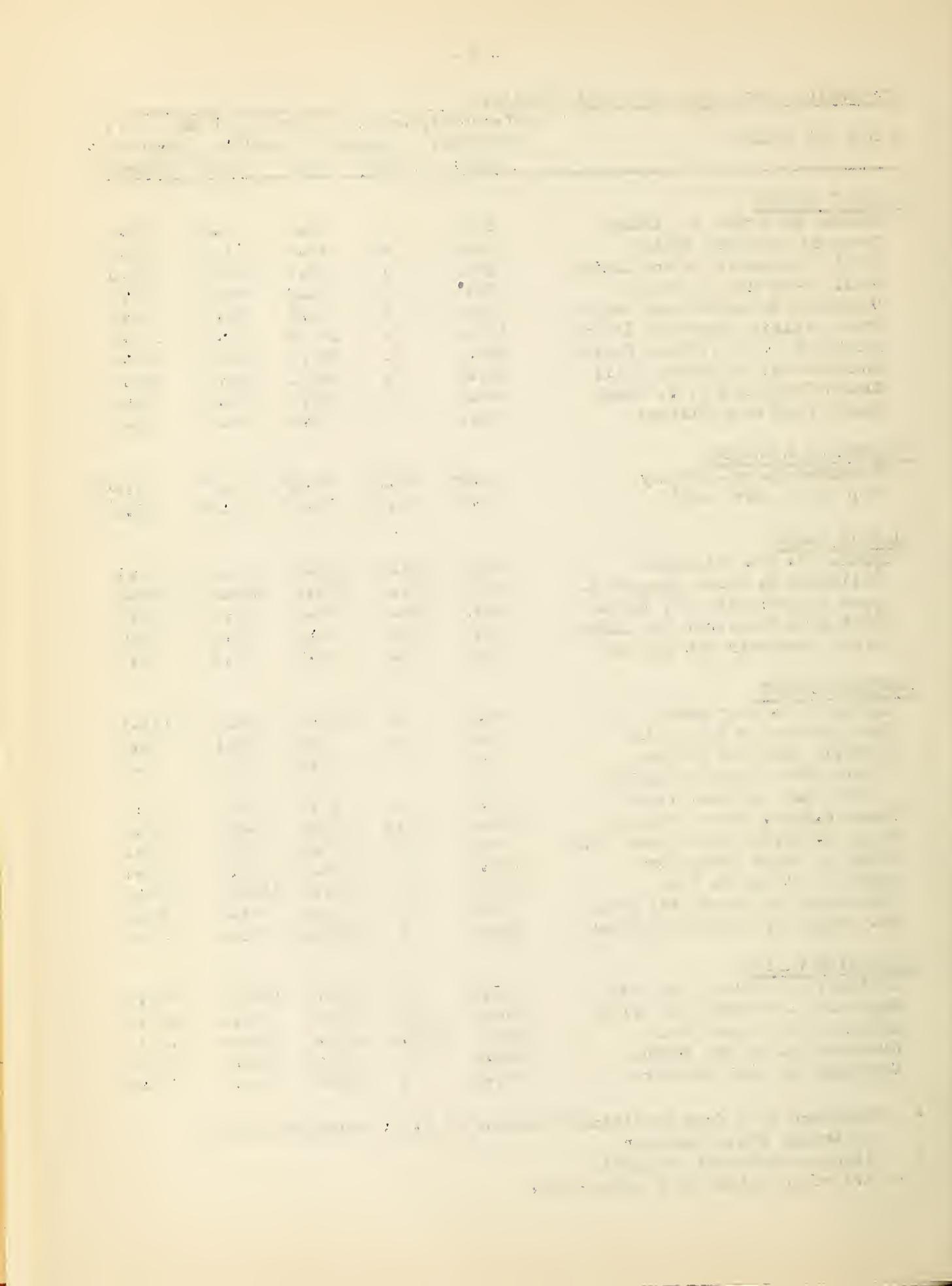
Streamflow Forecasts, May, 1951 (Cont'd.)

BASIN AND STREAM	Apr.-Sept., inc. Streamflow in Thous. cu. ft.				
	Forecast		Measured Runoff*		10-yr.avg.
	1951	1950	1949	1948	1940-49
<b>CENTRAL OREGON</b>					
Ochoco Reservoir Net Inflow	24.0	a	33.3	72.3	27.8
Crescent Lake Net Inflow	25.0	a	29.4	27.4	16.2
Little Deschutes R. nr. Lapino	110.0	a	122.1	105.1	75.0
Odell Creek near Crescent	32.0	a	34.9	34.7	26.8
Deschutes R. below Snow Creek	70.0	a	76.2	78.2	53.0
Crane Prairie Reservoir Inflow	140.0	a	151.6	141.9	107.2
Deschutes R. at Pringle Falls	310.0	a	285.9	262.4	254.0
Deschutes R. at Bonham Falls	560.0	a	550.1	507.2	455.2
Tumalo Creek and C. S. Canal	56.0	a	58.1	53.2	45.4
Squaw Creek near Sisters	62.0	a	50.8	56.5	45.0
<b>SOUTHCENTRAL OREGON</b>					
Chewaucan R. nr. Paisley	74.0 <sup>b</sup>	67.2 <sup>b</sup>	65.0 <sup>b</sup>	74.5 <sup>b</sup>	61.8 <sup>b</sup>
Deep Creek Above Adol	70.0 <sup>b</sup>	70.3 <sup>b</sup>	71.4 <sup>b</sup>	70.8 <sup>b</sup>	60.4 <sup>b</sup>
<b>KLAMATH BASIN</b>					
Sprague R. nr. Chiloquin	250.0	207.3	184.0	239.9	220.1
Williamson R. below Sprague R.	410.0	354.4	320.6	356.3	360.6
Upper Klamath Lake Net Inflow	540.0	423.9	396.7	461.5	463.6
Clear Lake Reservoir Net Inflow	31.0	33.5	34.7	70.2	39.0
Gerber Reservoir Net Inflow	20.0	14.7	20.2	21.9	17.6
<b>SOUTHERN OREGON</b>					
Applegate R. near Ruch	80.0	a	118.4	166.3	111.1
Hyatt Reservoir Net Inflow	4.0	a	7.6	9.1	5.5
Fourmile Lake Net Inflow	6.0	a	8.5	11.0	7.5
Little Butte Cr. N. Fk. below Fish Lake (Natural Flow)	12.0	a	18.9	16.2	13.4
Rogue R. N. Fk. above Prospect	340.0	387.6	375.5	343.7	287.2
Rogue R. Mid. Fk. plus Power Canal	80.0	a	91.1	83.1	70.1
Rogue R. below South Fork	720.0	a	790.8	732.5	622.1
Rogue R. at Grants Pass	910.0	a	975.0	1138.1	808.2
Clearwater R. above Trap Creek	60.0	a	71.8	67.4	59.9
No. Umpqua R. below Lake Creek	155.0	a	183.0	174.3	154.2
<b>WILLAMETTE VALLEY</b>					
Willamette R. Mid. Fk. at Lula	960.0	a	1019.2	1025.9	755.0
McKenzie R. at McKenzie Bridge	610.0	771.8	716.4	646.4	525.4
McKenzie River near Vida	1300.0	1725.2	1516.7	1419.5	1116.7
Clackamas R. at Big Bottom	180.0	a	177.5	231.1	151.0
Clackamas R. near Cazadero	830.0	a	1159.0	843.6	732.6

\* - Discharge data from preliminary records of U. S. Geological Survey  
and Oregon State Engineer

a - Discharge data not available

b - April-June rather than April-Sept.

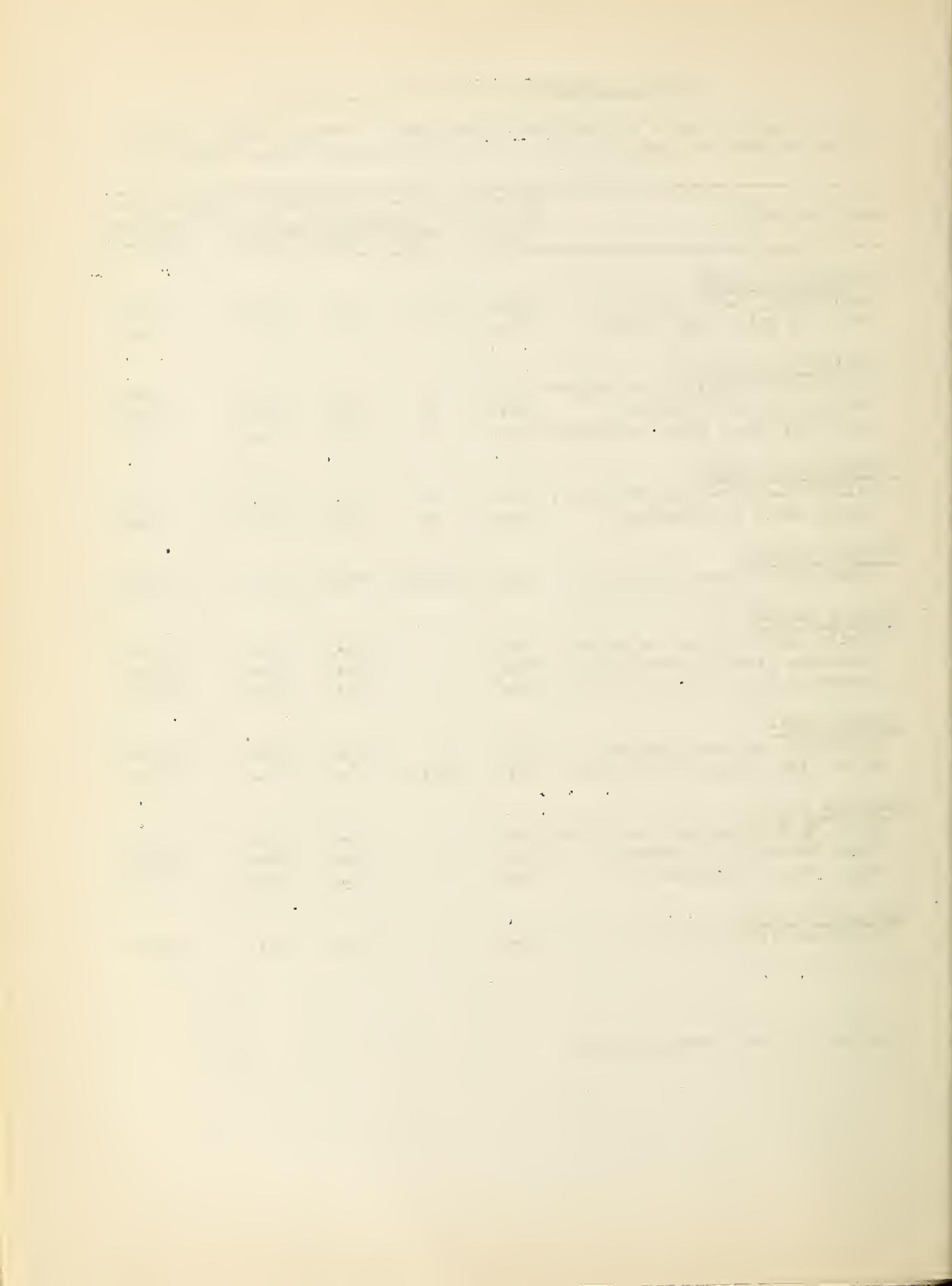


OREGON STREAMFLOW FORECASTS, MAY 1, 1951

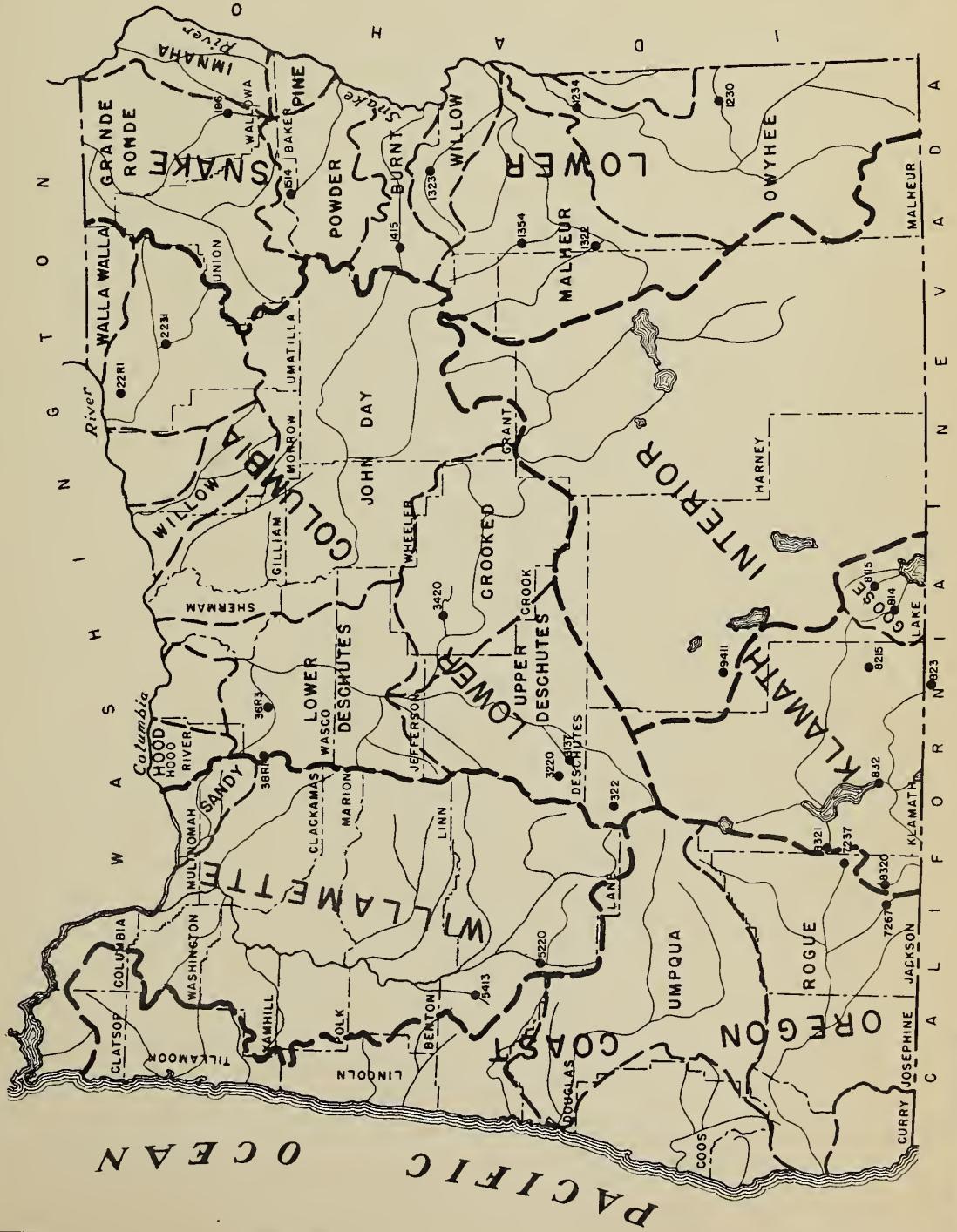
The following forecasts are for the period April 1 through July 1 and will be of value both to irrigationists and hydro-power generating interests:

BASIN AND STREAM	Apr.-July, Inc. Streamflow in Thous. A.F.				
	Forecast 1951	Measured 1950	Runoff 1949	1948	10-yr. avg. 1940-49
<u>NORTHCENTRAL OREGON</u>					
Hood River, W.Fk. near Dee	165.0	199.6	197.2	134.4	123.0
White R. below Tygh Valley	155.0	a	245.6	159.1	125.2
<u>UMATILLA-WALLA WALLA</u>					
Walla Walla R. So.Fk. nr. Milton	54.0	a	70.4	86.1	56.3
Umatilla R. at Pendleton	155.0	a	208.5	304.9	166.2
McKay Cr. above McKay Reservoir	24.7	a	22.6	63.2	29.3
<u>NORTHEASTERN OREGON</u>					
Wallowa R. E.Fk. plus Power Pl.	10.0	a	9.4	13.1	9.1
Powder River at Salisbury	67.0	a	68.8	76.2	60.1
<u>EASTERN OREGON</u>					
Owyhee above Owyhee Reservoir	540.0	299.6	472.1	234.8	378.9
<u>CENTRAL OREGON</u>					
Little Deschutes R. nr. Lapine	98.0	a	106.8	90.3	66.7
Deschutes R. at Benham Falls	380.0	a	361.9	316.3	306.6
Deschutes R. at Pringle Falls	205.0	a	162.8	132.1	155.9
<u>KLAMATH BASIN</u>					
Williamson R. below Sprague R.	345.0	a	257.9	293.4	295.9
Upper Klamath Lake Net Inflow	455.0	333.1	317.0	367.8	363.6
<u>SOUTHERN OREGON</u>					
Rogue R. Mid.Fk. plus Power Canal	54.0	a	74.9	66.1	55.8
Rogue R.N.Fk. above Prospect	280.0	a	324.1	289.7	239.0
Rogue River Below So.Fk.	585.0	a	664.4	598.3	502.2
<u>WILLAMETTE VALLEY</u>					
Clackamas R. at Big Bottom	135.0	a	195.6	141.8	120.8

a - Discharge data not available



## IMPORTANT OREGON RESERVOIRS



SCALE IN MILES  
1-27-49



## STATUS OF RESERVOIR STORAGE, MAY 1, 1951

BASIN and STREAM	RESERVOIR	CAPACITY (Thous. A.F.)	USABLE	THOUS. A.F.	IN STORAGE ABOUT MAY 1				
			1951	1950	1949	1948	1940-49		
UPPER COLUMBIA DRAINAGE									
LOWER SNAKE IN OREGON									
Owyhee	Antelope	36.5	N.R.	--	--	--	--		
	Owyhee	715.0	715.0	644.7	592.7	481.8	658.3		
Malheur	Warm Springs	191.0	120.4	72.4	98.3	70.2	150.3		
	Agency Valley	60.0	50.0	47.5	57.1	52.2	57.7		
	Willow Creek No. 3	21.0	N.R.	--	--	--	--		
Burnt	Unity	25.2	23.5	20.8	23.4	19.4	22.9		
Powder	Thief Valley	17.4	N.R.	17.4 <sup>d</sup>	12.8 <sup>d</sup>	17.4 <sup>d</sup>	17.1 <sup>d</sup>		
Grande Ronde	Wallowa Lake	40.9	21.2	12.3	21.1	19.3	24.4		
LOWER COLUMBIA DRAINAGE									
Umatilla	McKay	74.0	68.2	67.0	65.5	71.9	66.6		
	Cold Springs	50.0	48.1	49.9	48.0	49.7	48.4		
Deschutes	Ochoco	46.0	46.3	33.6	39.0	41.5	33.5		
	Crescent Lake	54.9	48.1	51.8	53.4	49.9	40.4		
	Crane Prairie	55.3	57.4	50.7	42.6	32.7	39.2		
	Wickiup	180.0	183.7	175.0	183.9	141.8	86.6 <sup>e</sup>		
Willamette	Cottage Grove	30.1 <sup>b</sup>	23.8	28.7	26.7	29.6	26.9 <sup>e</sup>		
	Fern Ridge	94.2 <sup>b</sup>	72.6	86.1	73.4	93.3	72.3 <sup>f</sup>		
	Dorena	70.5 <sup>b</sup>	49.8	53.2	--	--	--		
WEST COAST DRAINAGE									
Rogue	Fish Lake	7.8	6.9	5.4	5.9	4.0	5.2		
	Fourmile Lake <sup>a</sup>	16.1 <sup>a</sup>	12.7	11.0	9.6	2.4	8.2		
	Emigrant Gap	8.3	7.3	8.4	8.2	8.3	8.2		
	Hyatt Prairie <sup>a</sup>	16.1 <sup>a</sup>	9.6	8.1	12.3	6.0	8.8		
Klamath	Upper Klamath Lake	584.0 <sup>c</sup>	557.5	531.4	510.0	466.3	479.3		
	Gerber	94.0	59.9	51.4	47.7	40.9	60.3		
	Clear	440.2	145.5	164.0	184.4	176.6	271.9		
Goose Lake	Cottonwood	4.1	4.6	4.3	3.5	3.3	3.2 <sup>g</sup>		
	Drew	62.5	65.2	62.5	62.5	40.8	54.7 <sup>h</sup>		

N.R. - No Report

a - By Ditch to Rogue River side  
from Klamath Drainage

b - Storage space reserved for flood control

c - Based on gage zero elevation of 4135.0

d - Data partly estimated - Subject to error

e - 1943-49

f - 1942-49

g - Excl. 1942, 43

h - Excl. 1942



VALLEY PRECIPITATION<sup>a</sup>

DRAINAGE DIVISIONS	CURRENT YEAR		LAST YEAR	
	Oct. 1, 1950 - May 1, 1951	P	Oct. 1, 1949 - May 1, 1950	D
Southeastern	7.42	+.81	6.55	-0.63
Southcentral	9.81	+2.71	5.21	-1.95
Central	11.55	+3.31	10.25	+0.42
Columbia River	17.23	+5.24	13.31	+1.11
Wallowa Mountains	10.62	-1.56	11.26	+0.20
Blue Mountains	9.99	+.18	11.36	-0.59
Southern	29.76	+9.47	19.35	-0.31
Willamette Valley	59.67	+16.73	52.70	+9.12

P - Inches Precipitation

D - Inches Departure from normal

Southeastern - Malheur and Owyhee drainages

Southcentral - Interior Basin drainages and Goose Lake

Central - Deschutes and Crooked drainages

Columbia River - Lower valleys of the Walla Walla, Umatilla, John Day, Deschutes and Hood River drainages

Wallowa Mountains - Imnaha, Wallowa, Catherine, Eagle and Pine drainages

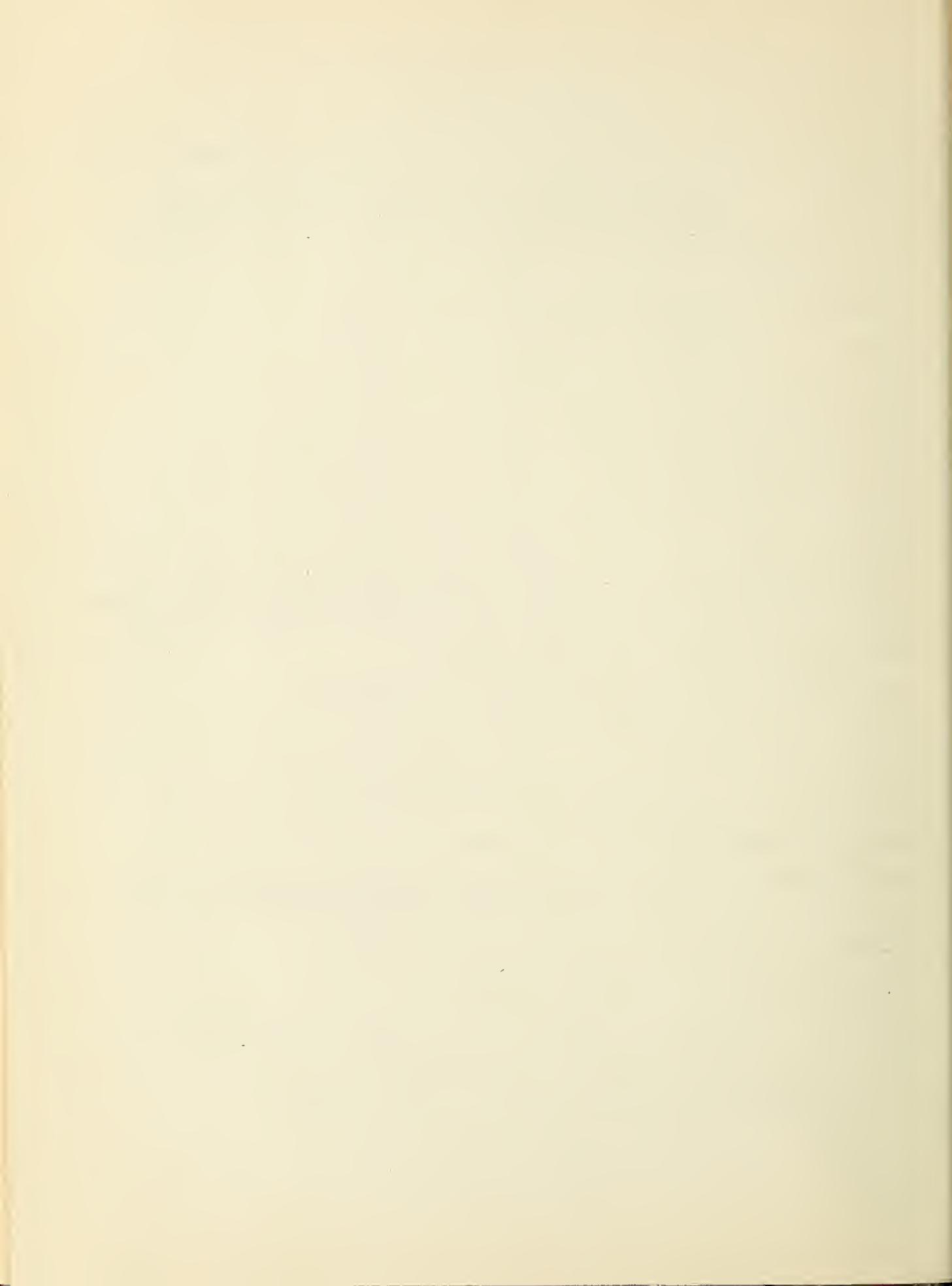
Blue Mountains - Upper valleys of the Burnt, Powder, Grande Ronde, Umatilla Walla Walla, John Day, Silvies and Malheur drainages

Southern - Umpqua, Rogue and Klamath drainages

Willamette Valley - All Willamette drainages

Note: Stations used for determining the averages for the current year are not necessarily the same as those used last year.

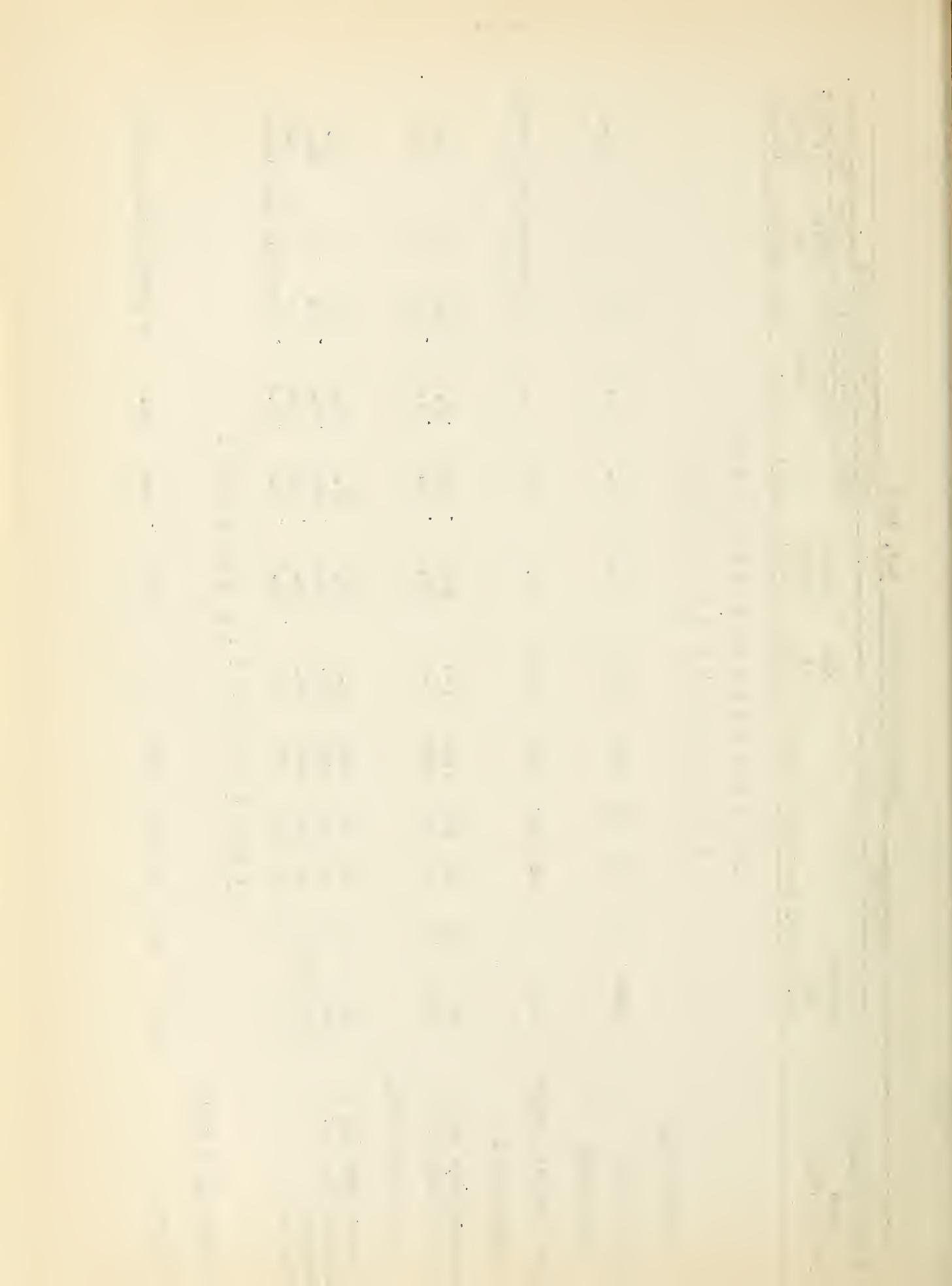
a - Preliminary data computed from Weather Bureau records



**OREGON SNOW SURVEYS, MAY, 1951**

EQUITATION

DRAINAGE BASIN and SNOW COURSE	LOCATION	SNOW COVER MEASUREMENTS																
		Number or State	Sec.	Twp.	Range	Elev.	Survey	Water Content (In.)		Past Record	Av. Water Content							
								Date of Survey	Snow Depth (In.)	Same Approx. Date	Years of Record							
<u>UPPER COLUMBIAN DRAINAGE</u>																		
<u>LOWER SNAKE RIVER</u>																		
CHYHEE RIVER																		
Silver City	BURNT RIVER	Idaho	6	5S	3W	6400	5-3	3.0	1.2	12.1	5.3							
Blue Mountain Summit	IMNAHA RIVER	141	6	12S	36E	5098	4-29	0.0	0.0	1.4	No previous May surveys							
Aneroid Lake No. 1	GRANDE RONDE RIVER	183	16	4S	45E	7480	5-1	87.5	37.4	46.8	36.7							
Aneroid Lake No. 2		183A	16	4S	45E	7000	5-1	68.2	28.2	35.0	26.1							
Tollgate		221	24&25	1S	35E	4300	5-1	0.0	0.0	2.6	.. -							
		212	32	4N	38E	5070	5-1	24.6	10.0	30.1	No previous May surveys							
<u>LOWER COLUMBIAN DRAINAGE</u>																		
Walla Walla River	Tollgate	212	32	4N	38E	5070	5-1	24.6	10.0	30.1	No previous May surveys							



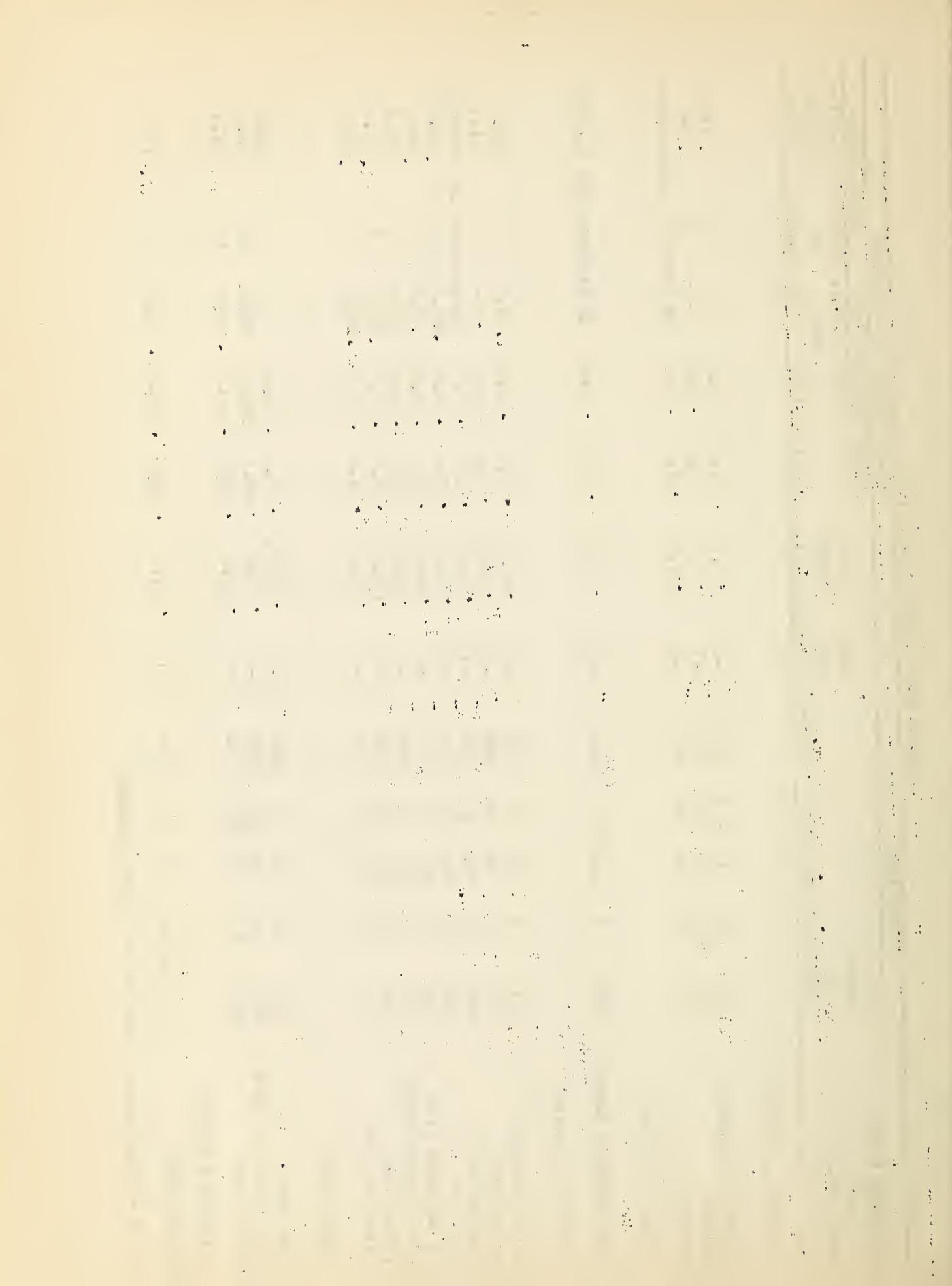
## OREGON SNOW SURVEYS, MAY, 1951

DRAINAGE BASIN and SNOW COURSE	Number or State	LOCATION			SNOW COVER MEASUREMENTS			Past Record
		Sec.	Twp.	Elev.	Date of Survey	Snow Depth (In.)	Water Content Same approx. Date 1951	Years of Record 1949
<b>UMATILLA RIVER</b>								
Emigrant Springs	222	29	LN	35E	3925	5-1	0.7	0.0
Meacham	221	24&25	16	35E	4300	5-1	0.0	2.6
Tollgate	212	32	4N	38E	5070	5-1	24.6	10.0
<b>JOHN DAY RIVER</b>								
Blue Mountain Summit	141	6	12S	36E	5098	4-29	0.0	1.4
<b>DESCHUTES RIVER</b>								
Cascade Summit	321	7	23S	6E	4880	5-5	47.5	22.2
Clear Lake	361	29	4S	9E	3500	5-8	12.7*	6.2
Crescent Lake	325	11	24S	6E	4760	5-1	0.0	0.0
Hogg Pass	351	24	13S	7½E	4755	4-30	86.9	47.6
New Dutchman Flat	324A	21	18S	9E	6400	5-2	119.4	60.2
Three Creeks Meadow	331	3	17S	9E	5600	5-2	37.0	18.1
Windigo Pass	744	20	25S	6E	5800	5-1	105.6	48.2
Willamette Pass	323	21	24S	5½E	5600	5-1	96.6	43.8
<b>SANDY RIVER</b>								
Clear Lake	361	29	4S	9E	3500	5-8	12.7*	6.2
Phlox Point-Mt. Hood	452	6	3S	9E	5600	5-2	129.9	65.7
Still Creek	451	25	3S	8½E	3700	5-2	42.2	20.5
<b>CLACKAMAS RIVER</b>								
Peavine Ridge	591	14&16	6S	7E	3500	5-1	41.6	18.9

## - 7 -

Emigrant Springs	222	29	LN	35E	3925	5-1	0.7	0.0	0.0	0.0	0.0
Meacham	221	24&25	16	35E	4300	5-1	0.0	0.0	0.0	0.0	0.0
Tollgate	212	32	4N	38E	5070	5-1	24.6	10.0	30.1	No previous May surveys	No previous May surveys
<b>JOHN DAY RIVER</b>											
Blue Mountain Summit	141	6	12S	36E	5098	4-29	0.0	0.0	0.0	0.0	0.0
<b>DESCHUTES RIVER</b>											
Cascade Summit	321	7	23S	6E	4880	5-5	47.5	22.2	45.1	31.7	5
Clear Lake	361	29	4S	9E	3500	5-8	12.7*	6.2	23.8	-	21.1
Crescent Lake	325	11	24S	6E	4760	5-1	0.0	0.0	13.0	No previous May surveys	No previous May surveys
Hogg Pass	351	24	13S	7½E	4755	4-30	86.9	47.6	58.7	65.3	4
New Dutchman Flat	324A	21	18S	9E	6400	5-2	119.4	60.2	61.6	60.7	60.4
Three Creeks Meadow	331	3	17S	9E	5600	5-2	37.0	18.1	21.7	16.9	2
Windigo Pass	744	20	25S	6E	5800	5-1	105.6	48.2	53.3	50.0	2
Willamette Pass	323	21	24S	5½E	5600	5-1	96.6	43.8	46.1	49.2	49.2
<b>SANDY RIVER</b>											
Clear Lake	361	29	4S	9E	3500	5-8	12.7*	6.2	23.8	-	21.1
Phlox Point-Mt. Hood	452	6	3S	9E	5600	5-2	129.9	65.7	100.1	89.1	60.0
Still Creek	451	25	3S	8½E	3700	5-2	42.2	20.5	40.2	29.8	15.4

\* - Telegraphic - Subject to minor revision



## OREGON SNOW SURVEYS, MAY, 1951

DRAINAGE BASIN and SNOW COURSE	Number or State	Sec.	Twp.	Range	Elev.	Survey	LOCATION		SNOW COVER MEASUREMENTS		
							Date of Survey (In.)	Snow Depth (In.)	Water Ccr. (In.)	Same approx. Date	Years of Record
								1951	1950	1949	
WILLAMETTE RIVER											
Cascade Summit	321	7	23S	6E	4880	5-5	47.5	22.2	45.1	31.7	5
Hogg Pass	351	24	13S	7 $\frac{1}{2}$ E	4755	4-30	86.9	47.6	58.7	65.3	4
Marion Forks	553	28	11S	7E	2730	4-30	0.0	0.0	18.5	-	2
Santiam Junction	552	14	13S	7E	3990	4-30	14.1	6.1	34.4	21.3	3
Willamette Pass	323	21	24S	5 $\frac{1}{2}$ E	5600	5-1	96.6	43.8	52.3	46.1	2
							W E S T C O A S T	D R A I N A G E			
UMPQUA RIVER											
Diamond Lake	743	29	27S	6E	5315	4-29	30.0	12.8	18.9	15.4	12
Windigo Pass	744	20	25S	6E	5800	5-1	105.6	48.2	53.3	50.0	2
ROGUE RIVER											
Annie Spring	831	19	31S	6E	6018	5-1	101.4	46.8	46.5	43.8	12
Billie Creek Divide	722	30	36S	5E	5300	5-1	T	21.0	22.3	4	24.8
Fish Lake	725	3	37S	4E	4865	5-1	0.0	0.0	7.6	6.0	2
Hyatt Prairie	723	15	39S	3E	4900	5-1	0.0	0.0	0.0	-	6.8
Park Headquarters	838	8	31S	6E	6450	5-1	131.4	61.4	60.0	59.0	7
Silver Lurn	7219	30	30S	4E	3720	5-1	0.0	0.0	6.5	No previous May survey	57.9
South Fork Canal	7218	12	33S	3E	3500	5-1	0.0	0.0	0.0	No previous May survey	
KLAMATH LAKE BASIN											
Annie Spring	831	19	31S	6E	6018	5-1	101.4	46.8	46.5	43.8	12
Billie Creek Divide	722	30	36S	5E	5300	5-1	T	21.0	22.3	4	24.8

Klamath Lake Basin

Annie Spring	831	19	31S	6E	6018	5-1	101.4	46.8	46.5	43.8	12
Billie Creek Divide	722	30	36S	5E	5300	5-1	T	21.0	22.3	4	24.8
Fish Lake	725	3	37S	4E	4865	5-1	0.0	0.0	7.6	6.0	2
Hyatt Prairie	723	15	39S	3E	4900	5-1	0.0	0.0	0.0	-	6.8
Park Headquarters	838	8	31S	6E	6450	5-1	131.4	61.4	60.0	59.0	7
Silver Lurn	7219	30	30S	4E	3720	5-1	0.0	0.0	6.5	No previous May survey	57.9
South Fork Canal	7218	12	33S	3E	3500	5-1	0.0	0.0	0.0	No previous May survey	

Klamath Lake Basin

Annie Spring	831	19	31S	6E	6018	5-1	101.4	46.8	46.5	43.8	12
Billie Creek Divide	722	30	36S	5E	5300	5-1	T	21.0	22.3	4	24.8



OREGON SNOW SURVEYS, M.Y., 1951

KLAMATH LAKE BASIN (Cont'd.)	Chemult No. 1	834	21	27S	8E	4760	5-7	0.0	1.2	0.0	5	0.3
Giyatt Prairie	723	15	39S	3E	4900	5-1	0.0	0.0	—	—	2	4.4
Lake of the Woods	835	11	57S	5E	4960	5-3	0.7	0.2	—	—	5	5.9
Park Headquarters	838	8	31S	6E	6450	5-1	131.4	61.4	60.0	59.0	7	57.9
Quartz Mountain No. 1	811	2	38S	16E	5320	5-1	0.0	0.0	No previous survey	No previous survey	No previous survey	May survey

GOOSE LAKE BASIN

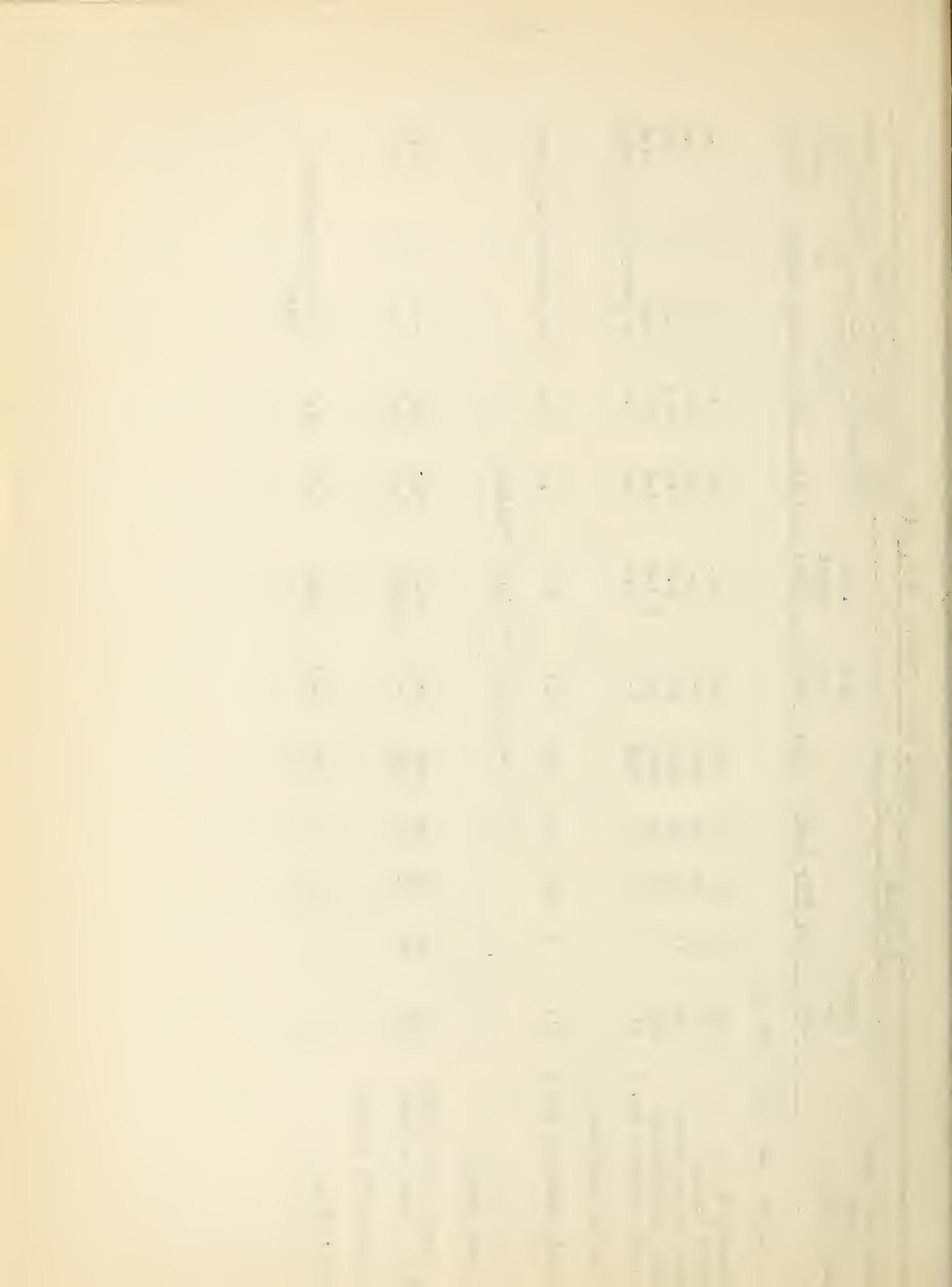
Quartz Mountain No. 1 811 2 38S 16E 5320 5-1 0.0 0.0 0.0 No previous May survey

WOOD PTWFB

Greenpoint Reservoir	453	28	2N	9E	3400	4-14	24.8	8.8	31.7	-	2	22.6
Tilly Jane-Mt. Hood	432	15	2S	9E	6000	4-8	128.0	58.0	59.1	-	2	50.0

WILLAMETTE VALLEY

Mary's Peak 541 21 128 7% 3620 4-21 16.3 7.0 37.1 No other comparative data



The following organizations cooperate in the Oregon snow survey work:

STATE

Idaho Cooperative Snow Surveys  
Nevada Cooperative Snow Surveys  
Oregon Agricultural Experiment Station  
Oregon State Engineer and corps of State Watermasters  
Oregon State Highway Engineers

FEDERAL

Department of Agriculture  
Forest Service  
Soil Conservation Service  
Department of Commerce  
Weather Bureau  
Department of the Interior  
Bonneville Power Administration  
Bureau of Reclamation  
Fish and Wildlife Service  
Geological Survey  
Indian Service  
National Park Service  
War Department  
Army Engineer Corps

PUBLIC UTILITIES

California-Pacific Utilities Company  
Portland General Electric Company  
The California Oregon Power Company

MUNICIPALITIES

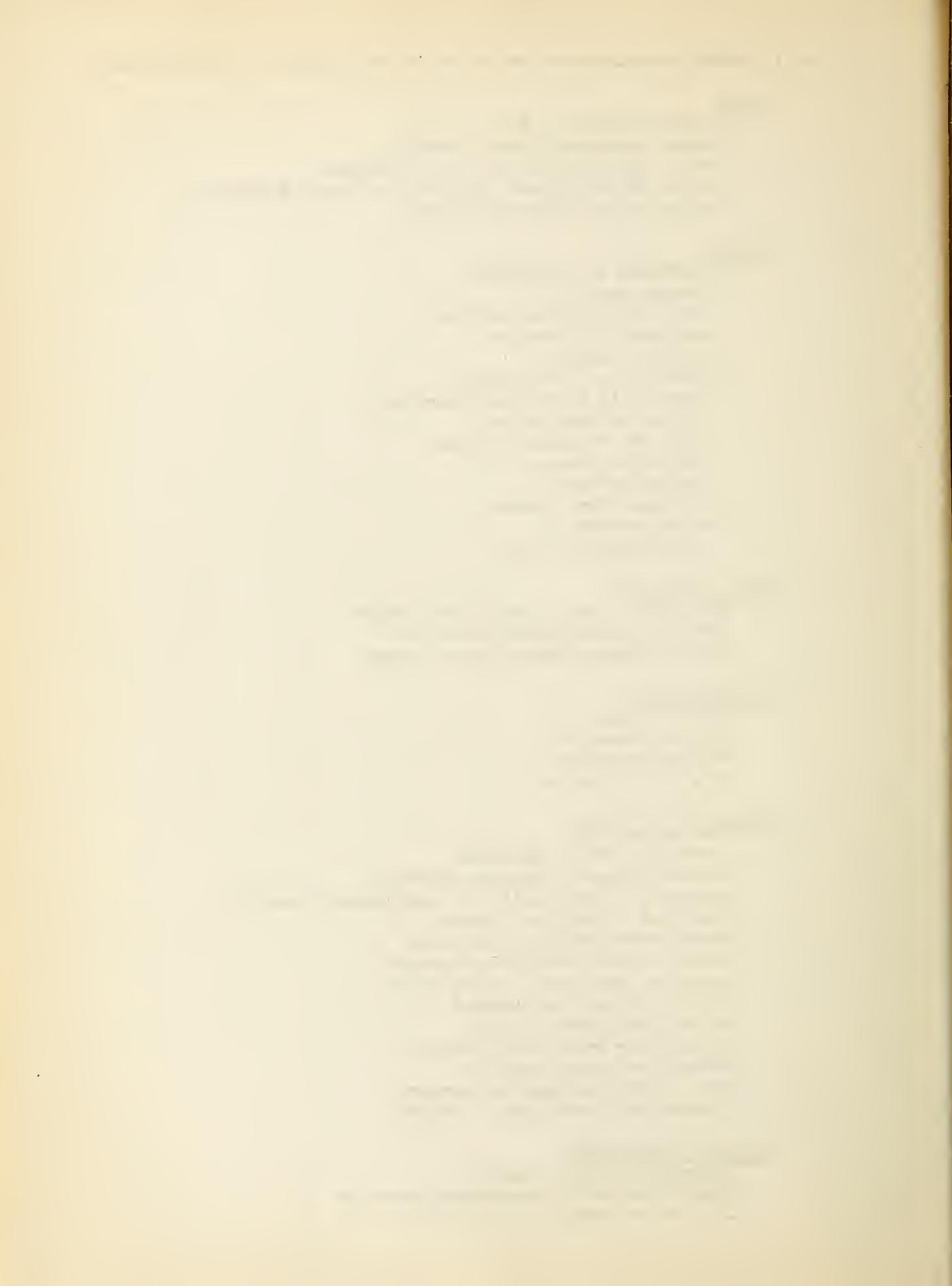
City of Baker  
City of Corvallis  
City of LaGrande  
City of The Dalles

IRRIGATION DISTRICTS

Associated Ditch Companies  
Central Oregon Irrigation District  
Deschutes County Municipal Improvement District  
East Fork Irrigation District  
Grants Pass Irrigation District  
Jordan Valley Irrigation District  
Lakeview Water Users Incorporated  
Medford Irrigation District  
Ochoco Irrigation District  
Rogue River Irrigation District  
Talent Irrigation District  
Vale, Oregon Irrigation District  
Warmsprings Irrigation District

PRIVATE ORGANIZATIONS

Amalgamated Sugar Company  
South Wasco Soil Conservation District  
The Crag Rats-Hood River, Oregon





Federal - State - Private  
COOPERATIVE SNOW SURVEYS

Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"





